



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,114	10/22/2003	Jason A. Sullivan	11072.9	5337

7590 06/17/2005
KIRTON & McCONKIE
1800 Eagle Gate Tower
60 East South Temple
Salt Lake City, UT 84111

EXAMINER

BUI, HUNG S

ART UNIT	PAPER NUMBER
----------	--------------

2841

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/691,114

Applicant(s)

SULLIVAN, JASON A.

Examiner

Hung S. Bui

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-20 and 26-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26-30 is/are allowed.
- 6) ☒ Claim(s) 2-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/17/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The indicated allowability of claims 8-9, 14 is withdrawn in view of the newly discovered reference(s) to Deters [US 5,227,957]. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 2-5, 10-14 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Unrein [US 6,490,157].

Regarding claims 2, 10, 14, Unrein discloses a dynamically module processing unit (figures 1a-c) comprising:

- a first non-peripheral based encasement (101);
- a first processor (column 3, lines 39-41) coupled to a first optimized circuit board mounted therein a module (103) coupled to the encasement including a first bus system, wherein the first optimized circuit board is coupled to the first non-peripheral based encasement (figures 1a-c); and

Art Unit: 2841

- a first dynamic back plane coupled to the first encasement (figures 1a-c) for providing flexibility and support to peripherals (103, 105, 107, 109 and 111) and applications, wherein the dynamically modular processing unit is configured to provide processing versatility through selective coupling to one or more other dynamically modular processing units in an enterprise, wherein all of the dynamically modular processing units are interconnected at the system bus level (column 3, lines 23-34).

Regarding claims 3-4, Unrein discloses the first optimized circuit board including a plurality of interconnected layered segments (column 3, lines 41-42 or figure 4b).

Regarding claim 5, Unrein discloses a plurality of peripheral connection ports (figure 3).

Regarding claims 11-12, Unrein discloses the backplane/cpu being used for a plurality of application and system (column 5, lines 1-38).

Regarding claim 13, Unrein discloses the use of a thermodynamic cooling process (column 7, lines 44-55).

Regarding claim 16, Unrein discloses the processing unit being a CPU.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6-7, 15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unrein.

Regarding claim 6, Unrein discloses everything claimed except the use of a mass storage device as the peripheral.

Unrein (figure 1a) discloses the use of a mass storage device (109) as a peripheral coupled to a backplane (101).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that a mass storage device would have been used with the ports (307) of Unrein, as suggested by figure 1a, for the purpose of providing mass storage.

Regarding claim 7, Unrein discloses the use of a plurality of cpu modules connected to the backplane (column 5, lines 39-58).

Regarding claim 15, Unrein disclose everything claimed except the backplane being selectively exchangeable. Unrein discloses the CPU being an exchangeable (column 7, lines 57-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to also have the backplane being exchangeable in order to facilitate system upgrades.

Regarding claims 17-20, Unrein discloses the claimed invention except for the size and type of device.

It would have been an obvious matter of design choice to configure the module processing unit as a handheld device, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as

being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

The particular type of device would have been an obvious design consideration based on the specific application and connection requirements intended therefor.

6. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unrein in view of Wood et al. [US 5,689,406].

Regarding claims 8-9, Unrein discloses the plurality of peripherals can connect together by the same common bus system in the encasement (column 3, lines 58-64).

Unrein discloses the instant invention except for the first bus system being connected to the second bus system directly.

Wood et al. disclose a modular computer system (figure 2a) having a plurality of peripheral devices (201) connected together to a back plane (208) directly.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the connection design of Wood et al. for the connections of Unrein, for the purpose of reducing unwanted transmission line effects and signal degradation introduced by impedance mismatch and providing increased processing power to the enterprise.

Allowable Subject Matter

7. Claims 26-30 are allowed.
8. The following is an examiner's statement of reasons for allowance: The cited references and the prior art of record, fail to teach or suggest, in the claimed combination, the modular processing system having a tri-board electrical printed circuit board configuration removably secured within the modular and connecting an flexibility interchangeable back plane.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

9. Applicant's arguments with respect to claims 2-20 and 26-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.


Art Unit: 2841

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/12/05

Hung Bui


KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800